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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/653,223	09/03/2003	Keiji Osawa	103173.04	2729
25944	7590	12/14/2004	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			SHAFFER, RICKY D	
			ART UNIT	PAPER NUMBER
			2872	

DATE MAILED: 12/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/653,223

Applicant(s)

OSAWA, KEIJI

Examiner

Ricky D. Shafer

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4-6 is/are allowed.
- 6) ☒ Claim(s) 1-3 and 7-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/281,324.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 09/03/03
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Applicant's election with traverse of species "B", depicted by Fig. 6, in the reply filed on 09/27/2004 is acknowledged. In view of applicant's statement that species "A", depicted by Fig. 2, schematically illustrates the subject matter of the invention, the species requirement with respect to species "A", depicted by Fig. 2, is withdrawn. However, the species requirement of species "B", depicted by Fig. 6; species "C", depicted by Fig. 13; and species "D", depicted by Fig. 14, is maintain due to their different structural features.

The requirement is still deemed proper and is therefore made FINAL.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 10 is rejected under 35 U.S.C. 102(b) as being anticipated by Saito ('960).

Saito discloses an optical filter comprising a plurality of birefringent plates [(1a,1b), (85,86)] for spatially dividing incident light, and at least one phase plate [(3), (84)], note figures 4(A) and 11(B), wherein the birefringent plates [(1a,1b),(85,86)] are thinner than phase plate [(3), (84)].

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito ('960) in view of Shinbori et al ('236) or Nakajima ('127).

Saito each disclose all of the subject matter claimed, note the above explanation, except for an IR blocking filter.

Shinbori et al and Nakajima each teach it is known to integrate an IR blocking filter within an optical filter in the same field of endeavor for the purpose of blocking IR light rays to an image sensor.

Therefore, it would have been obvious and/or within the level of one of ordinary skill in the art at the time the invention was made to modify the optical filter of Saito to include an IR blocking filter, as taught by Shinbori et al or Nakajima, in order to prevent detrimental IR light rays form entering an image sensor.

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a non-statutory double patenting ground

provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1, 7, 10 and 16 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,778,325.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the present application (10/653,223) discloses no additional invention or discovery other than what was already claimed and patented in U.S. Patent 6,778,325 or what would have been obvious to one of ordinary skill in the art at the time the invention was made.

U.S. Patent 6,778,325 discloses an optical filter comprising a plurality of birefringent plates (1a, 1d) that spatially divide incident light along directions each extending perpendicular to a direction in which the incident light advances to achieve two separate light fluxes respectively; and at least one phase plate (1c) provided between the plurality of birefringent plates, that creates a specific quantity of a phase difference between a light component vibrating in one vibrating direction and a light component vibrating in another vibrating direction extending perpendicular to the one vibrating direction for the two light fluxes emitted from one of the plurality of birefringent plates, without dividing the two light fluxes, wherein the plurality of birefringent plates are thinner than the phase plate. Note Fig. 2.

8. Claims 1-3 and 10-12 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 2 and 3 of U.S. Patent No. 6,650,474.

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Although the conflicting claims are not identical, they are not patentably distinct from each other because the present application (10/653,223) discloses no additional invention or discovery other than what was already claimed and patented in U.S. Patent 6,650,474 or what would have been obvious to one of ordinary skill in the art at the time the invention was made.

U.S. Patent 6,650,474 discloses an optical filter comprising a plurality of birefringent plates (1a,1d) that spatially divide incident light along directions each extending perpendicular to a direction in which the incident light advances to achieve two separate light fluxes respectively; and at least one phase plate (1c) provided between the plurality of birefringent plates, that creates a specific quantity of a phase difference between a light component vibrating in one vibrating direction and a light component vibrating in another vibrating direction extending perpendicular to the one vibrating direction for the two light fluxes emitted from one of the plurality of birefringent plates, without dividing the two light fluxes, wherein the plurality of birefringent plates are thinner than the phase plate. Note Fig. 2.

9. Claims 1-3 and 10-15 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,327,085.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the present application (10/653,223) discloses no additional invention or discovery other than what was already claimed and patented in U.S. Patent 6,327,085 or what would have been obvious to one of ordinary skill in the art at the time the invention was made.

U.S. Patent 6,327,085 discloses an optical filter comprising a plurality of birefringent plates (1a,1d) that spatially divide incident light along directions each extending perpendicular to a direction in which the incident light advances to achieve two separate light fluxes respectively;

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and at least one phase plate (1c) provided between the plurality of birefringent plates, that creates a specific quantity of a phase difference between a light component vibrating in one vibrating direction and a light component vibrating in another vibrating direction extending perpendicular to the one vibrating direction for the two light fluxes emitted from one of the plurality of birefringent plates, without dividing the two light fluxes, wherein the plurality of birefringent plates are thinner than the phase plate. Note Fig. 2.

10. Claims 8, 9 and 17-20 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,778,325 in view of Shinbori et al ('236).

U.S. Patent 6,778,325 discloses all of the subject matter, note the above explanation, except for the optical filter including an IR blocking filter and employed in an camera/imaging apparatus.

Shinbori et al teaches it is known to integrate an IR blocking filter within an optical filter of a camera/imaging apparatus in the same field of endeavor for the purpose of blocking IR light rays to an image sensor. Note Fig. 10.

Therefore, it would have been obvious and/or within the level of one of ordinary skill in the art at the time the invention was made to modify the optical filter of Saito to include an IR blocking filter, as taught by Shinbori et al, in order to prevent detrimental IR light rays from entering an image sensor of a camera/imaging apparatus.

11. Claims 4-6 are allowed.

12. The disclosure is objected to because of the following informalities:

35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms which are not clear, concise and exact. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. Examples of some unclear, inexact or verbose terms used in the specification are:

On page 27, line 1, the language "th" should be changed to --the--.

On page 18, line 1, the language "sinc" should be changed to --since--.

On page 30, line 1, the language "th phas" should be changed to read --the phase--.

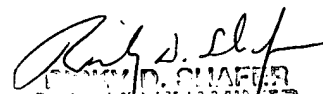
Applicant should carefully review the first line of every page for correctness.

Appropriate correction is required.

13. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ricky D. Shafer whose telephone number is (571) 272-2320. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RDS // December 11, 2004


RICKY D. SHAFER
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